

California Energy Commission
STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

Addendum 11 for Projects With Location Changes Awarded
Funding Through the Alternative and Renewable Fuel and
Vehicle Technology Program Under Solicitation PON-11-602
– Alternative Fuels Infrastructure: Electric, Natural Gas,
Propane, E85, and Diesel Substitutes Terminals

California Energy Commission
Edmund G. Brown Jr., Governor



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ADDENDUM 11

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-11-602* was posted April 27, 2012 (CEC-600-2012-004)¹. The addendum *LHI* for PON-11-602 was posted September 21, 2012 (CEC-600-2012-004-AD)². This addendum applies the same localized health impacts assessment method. Three project proposers are requesting location changes. Under fuel category E85, RTC Fuels, LLC dba Pearson Fuels, has proposed five new site locations for the “19 Pearson Fuels E85 Stations” project. Under the Electric Vehicle Supply Equipment category, both Green Charge Networks and South Coast Air Quality Management District (SCAQMD) propose location changes. Green Charge Networks proposes 3 replacement locations, and SCAQMD proposes to add 15 new locations. The original and newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators³.

Table 1: Original and New Site Locations for Pearson Fuels, Green Charge Networks, and South Coast Air Quality Management District, Along With Environmental Justice Indicators

Original Site Locations	New Site Locations	EJ Indicators for New Location
Pearson Fuels 8815 Lake Murray Boulevard San Diego, CA 92119	Pearson Fuels 1933 W. Highlands Avenue San Bernardino, CA 92407	Minority, Age, Poverty, and Unemployment
Pearson Fuels 14804 Powers Street Lost Hills, CA 93249	Pearson Fuels 9320 Mira Mesa Boulevard San Diego, CA 92126	Poverty
Pearson Fuels 4707 First Street Livermore, CA 94551	Pearson Fuels 6357 Eastern Avenue Bell Gardens, CA 90201	Minority, Age, Poverty, and

1 Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004.

2 Baronas, Jean, 2012. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2012-004-AD.

3 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.9 percent (2009-2013), (iii.) city's unemployment rate exceeds California's unemployment rate of 5.5 percent as of October 2016, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

Original Site Locations	New Site Locations	EJ Indictors for New Location
		Unemployment
Pearson Fuels 3651 Lake Tahoe Boulevard South Lake Tahoe, CA 9615	Pearson Fuels 800 El Camino Real San Bruno, CA 94066	None
Pearson Fuels 890 Real Drive Pacific Palisades, CA 90272	Pearson Fuels 5675 Rosemead Avenue Temple City, CA 91780	Minority and Age
Green Charge Networks 13801 Mango Drive Del Mar, CA 92014	Green Charge Network 2480 Notre Dame Boulevard Chico, CA 95928	Poverty
Green Charge Networks 609 Rancho Conejo Boulevard Thousand Oaks, CA 91320	Green Charge Network 701 Ocean Street Santa Cruz, CA 95060	Poverty
Green Charge Networks 4449 Central Place Fairfield, CA 94534	Green Charge Network 111 Montecillo Road San Rafael, CA 94903	Minority and Age
	SCAQMD Arcadia USPS 41 Wheeler Avenue Arcadia, CA 91006	Minority and Age
	SCAQMD Big Bear City 630 Bartlett Road Big Bear Lake, CA 92315	Age, Poverty, and Unemployment
	SCAQMD Federal Realty 700 S. Sepulveda Boulevard El Segundo, CA 90245	None
	SCAQMD IQ Air 14351 Firestone Boulevard La Mirada, CA 90638	Minority and Age
	SCAQMD 9750 Vicksburg Avenue Los Angeles, CA 90045	Minority and Poverty
	SCAQMD 1036 Broxton Avenue Los Angeles, CA 90025	Minority and Poverty
	SCAQMD 101 N. Judge John Aiso Street Los Angeles, CA 90012	Minority and Poverty
	SCAQMD 6801 Hollywood Boulevard Los Angeles, CA 90028	Minority and Poverty
	SCAQMD La Kretz Technology Center 525 S. Hewitt Street Los Angeles, CA 90012	Minority and Poverty
	SCAQMD Federal Realty 7001 Hollywood Boulevard	Minority

Original Site Locations	New Site Locations	EJ Indicators for New Location
	Los Angeles, CA 90028	
	SCAQMD Lake Avenue Congregational Church 393 North Lake Avenue Pasadena, CA 91101	Minority
	SCAQMD Pasadena Convention Center 300 E. Green Street Pasadena, CA 91101	Minority
	SCAQMD Victoria Gardens Mall 12505 N. Main street Rancho Cucamonga, CA 91739	Minority
	SCAQMD Redlands Municipal Utilities 35 Cajun Street Redlands, CA 92373	Minority
	SCAQMD 1800 Northpark Boulevard San Bernardino, CA 92407	Minority, Age, Poverty, and Unemployment

Source: California Energy Commission staff

Air Quality and EJ Indicators

All proposed location changes are in nonattainment zones for ozone, particulate matter (PM⁴) 2.5, and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method⁵. According to staff's assessment, Arcadia, Bell Gardens, Big Bear Lake, La Mirada, Los Angeles, San Bernardino, San Rafael, and Temple City are considered high-risk communities.

4 "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for "microns in diameter."

5 California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

Table 2: EJ Indicators Compared With California
Yellow highlighted percentages indicate EJ indicators

	Below Poverty Level (2009 – 2013)	Black Persons (2010)	American Indian and/or Alaska Native (2010)	Asian and/or Pacific Islander (2010)	Persons of Hispanic or Latino Origin (2010)	Persons Under 5 Years of Age (2010)	Persons Over 65 Years of Age (2010)	Unemployment (October 2016)
California	15.3%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	5.5%
EJ Indicators	>15.3%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>5.5%
Arcadia	9.6%	1.2%	0.3%	59.2%	12.1%	4.3%	16.3%	2.9%
Bell Gardens	28.9%	0.9%	1.1%	0.6%	95.7%	9.3%	5.2%	5.9%
Big Bear Lake	15.8%	0.4%	1.0%	1.6%	21.4%	5.0%	20.4%	6.1%
Chico	24.5%	2.1%	1.4%	4.2%	15.4%	5.7%	10.6%	5.0%
El Segundo	7.3%	2.0%	0.4%	8.8%	15.7%	5.0%	10.1%	2.8%
La Mirada	7.5%	2.3%	0.8%	17.8%	39.7%	5.1%	15.2%	3.5%
Los Angeles	22.4%	9.6%	0.7%	11.3%	48.5%	6.6%	10.5%	5.4%
Pasadena	14.6%	10.7%	0.6%	14.3%	33.7%	6.0%	13.5%	4.5%
Redlands	14.5%	5.2%	0.9%	7.6%	30.3%	6.0%	13.1%	3.4%
Rancho Cucamonga	8.8%	9.2%	0.7%	10.4%	34.9%	6.2%	7.9%	4.3%
San Bernardino	33.0%	15.0%	1.3%	4.0%	60.0%	9.3%	7.9%	7.5%
San Bruno	6.7%	2.3%	0.6%	25.4%	29.2%	6.0%	12.7%	3.0%
San Diego	15.8%	6.7%	0.6%	15.9%	28.8%	6.2%	10.7%	4.5%
San Rafael	13.9%	2.0%	1.2%	6.1%	30.0%	6.2%	15.8%	3.4%
Santa Cruz	24.3%	1.8%	0.7%	7.7%	19.4%	3.9%	8.8%	4.8%
Temple City	10.8%	0.8%	0.4%	55.7%	19.3%	4.5%	15.1%	3.3%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000.06.00> and http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Location Analysis and Community Impacts

Based on the staff's assessment of the proposed station locations, it is expected that none of the surrounding communities would be disproportionately impacted by the projects. While overall air quality depends on a number of factors, the Energy Commission expects that air quality will improve over time due to both electric vehicles and those vehicles using E85(ethanol fuel blend), which will be replacing California reformulated gasoline (RFG). Replacing RFG will decrease criteria pollutants and toxic air contaminants which will benefit surrounding communities, especially those at risk.

APPENDIX A:

Localized Health Impact Report Assessment Method

Based on the California Energy Commission's interpretation of the *California ARB AQIP Guidelines*, this *LHI Report* assesses the potential impacts to communities as a result of the projects proposed by the ARFVTP. This report is prepared under the *California ARB AQIP Guidelines, California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

“(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.”

This *LHI Report* is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This *LHI Report* includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks⁶.

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (i.) exposure to air pollution, (ii.) cancer risk, (iii.) ozone concentration, (iv.) frequency of high ozone days, (v.) race/ethnicity, (vi.) poverty level, (vii.) home ownership, (viii.) median household value, (ix.) educational attainment, and (x.) sensitive populations (populations under 5 years of age or over 65 years of age).

⁶ California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the freight transportation projects at California seaports are compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

Part 1:

- Communities located in nonattainment air basins for ozone, PM 10 or PM 2.5

Part 2:

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
 - A minority subset represents more than 30 percent of a given city's population.
 - A city's poverty level exceeds California's poverty level.
 - A city's unemployment rate exceeds California's unemployment rate.
 - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.